



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,244	12/31/2003	Min-Seok Choi	P24738	6998
7055 7590 03/13/2007 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER STORMER, RUSSELL D	
			ART UNIT	PAPER NUMBER
			3617	
SHORTENED STATUTORY PERIOD OF RESPONSE		NOTIFICATION DATE	DELIVERY MODE	
3 MONTHS		03/13/2007	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/13/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
pto@gbpatent.com

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 5, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Tronville (previously cited; newly applied).

Tronville discloses a torsion beam axle suspension comprising left and right trailing arms 14, a torsion beam 12 coupled between the trailing arms, a wheel connector 50 provided on each trailing arm, and a shock absorber mount provided in the outermost end 14a of the trailing arms. As shown best in figures 2 and 4, the shock absorber 54 is mounted to the support or mount 52 inside of the outermost end 14a of the trailing arms, and rearward of the wheel connector 50.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

Art Unit: 3617

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 2, 6, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tronville in view of MacIsaac.

Tronville meets all of the limitations of claims 1, 5, and 8 as set forth in paragraph 2 above, but the shock absorber is not shown.

MacIsaac (previously applied) teaches a suspension assembly including a shock absorber. In figures 10 and 11 the connection between the axle and the shock absorber is in the form of a ball joint 250, including a ball stud and a socket. From this teaching it would have been obvious to provide the trailing arm suspension of Tronville with a shock absorber having a ball and socket joint as this would allow a wide range of movement (such as movement in more than one plane) between the shock absorber and the axle.

6. Claims 3, 7, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tronville in view of MacIsaac as applied to claims 2, 6, and 9 above, and further in view of Molenaar.

It is clear that the ball joint 250 of MacIsaac as applied to the trailing arms of Tronville would include a socket and a ball stud, but details of the ball and socket joint are not shown.

Molenaar teaches a ball and socket joint comprising a socket 3 bored with at least one hole to receive a fastener 20, and a ball stud 21 fitted in the socket. From this teaching it would have been obvious for the ball joint of Tronville as modified by MacIsaac to comprise a ball stud fitted in a socket for pivotal movement, and the socket having at least one bore for receiving a fastener so that the socket could be fastened to the axle assembly.

Response to Arguments

7. Applicant's arguments with respect to claims 1-3 and 5-10 have been considered but are moot in view of the new grounds of rejection.

Applicant has amended the specification to describe the mount (4a) as being provided inside of the outermost end of the trailing arms, and has referenced figure 2 as showing this. The "outer most" end of the trailing arms is not specifically pointed out in the specification and is not referenced with a reference character in the drawings, and the specification is silent as to whether "inside of" refers to the mount being spaced from the end, or being laterally inside of the trailing arms, or being inside a longitudinal end portion of the trailing arms. It should be noted that the lead line for reference character 4a points to a portion of the trailing arm near the rear end.

Claims 1, 5, and 8 claim the mount as being provided or formed inside of the outermost end of the trailing arms, but are silent as to what is meant by "inside of." Absent any clear definition of the term "inside of," this term is open to interpretation, and

Art Unit: 3617

can reasonably be interpreted as meaning "inside of the longitudinal dimension of the trailing arms.

It is submitted that the support or shock absorber mount 52 of Tronville is provided inside of the outermost end 14a of the trailing arms, as shown in figures 2 and 4, inasmuch as the in the longitudinal dimension of the trailing arms, the mount 52 is located somewhere within the ends, near but spaced from the rear end 14a, and is therefore "inside of" the outermost end 14a.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell D. Stormer whose telephone number is (571) 272-6687. The examiner can normally be reached on Monday through Friday, 9 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

3/7/07


RUSSELL D. STORMER
PRIMARY EXAMINER 3/2/07